

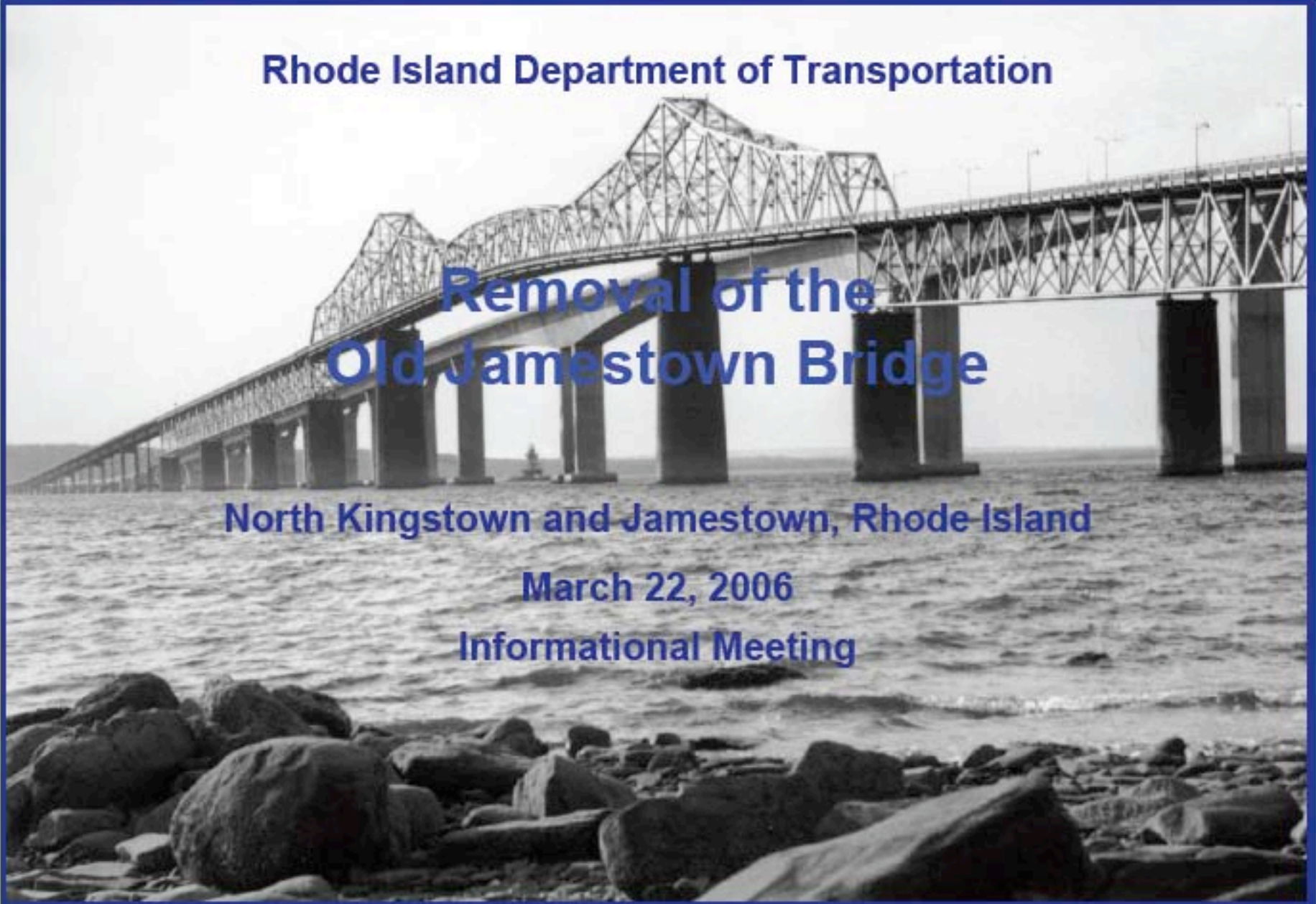
Rhode Island Department of Transportation

Removal of the Old Jamestown Bridge

North Kingstown and Jamestown, Rhode Island

March 22, 2006

Informational Meeting



Special Recognition

- ▶ to **Governor Donald Carcieri** for prioritizing the removal of the Old Jamestown Bridge
- ▶ to **Senator Lincoln Chafee** for securing the funds to complete the project



Project Team

► Rhode Island Department of Transportation

- Gordon R. Archibald, Inc.
- Parsons Brinkerhoff Quade & Douglas, Inc.
- Focus Demolition Consulting

► Cashman Equipment Corporation

- Joseph B. Fay Company
- Demtech, Inc.



Project Overview

- ▶ Contract Low Bid Price: \$19.5 Million
- ▶ Start of Work: Fall 2005
- ▶ Estimated Completion of Demolition Operations: December 2006
- ▶ Landscape and Cleanup Operations: Spring 2007
- ▶ Work Completed To Date:
 - removal of concrete and steel grid decking to expose structural steel
 - construction of a temporary barge berthing facility to facilitate removal of demolition debris

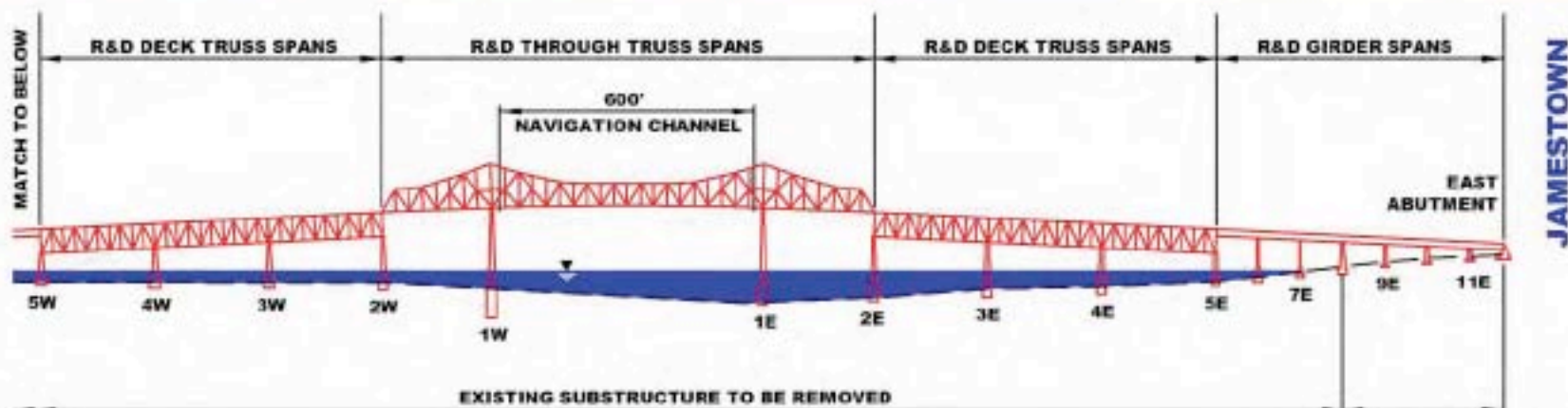


Project Area



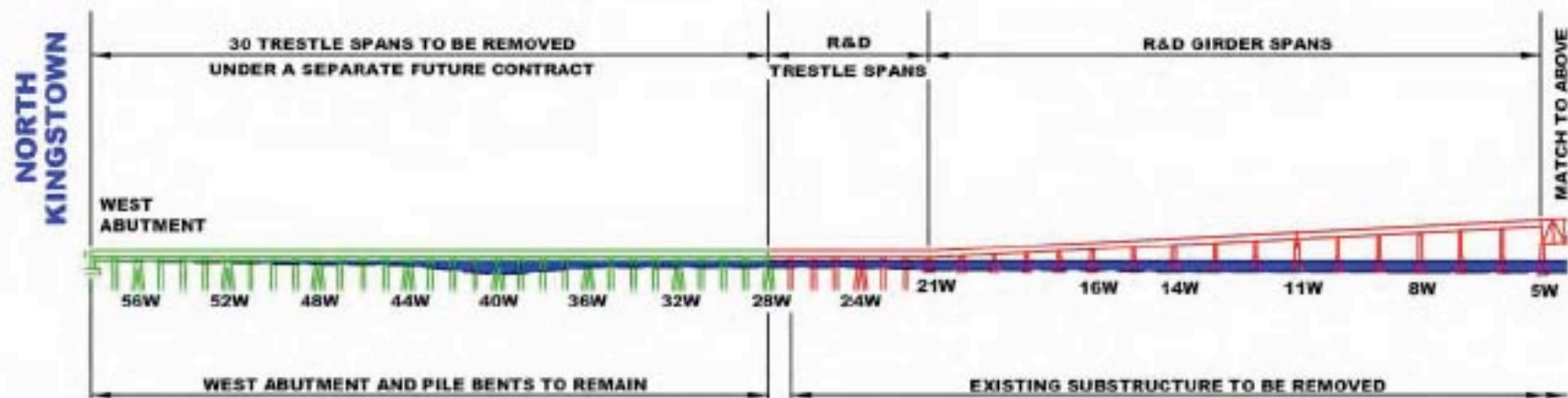
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PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH

PIERS 8E, 9E TO BE REMOVED
TO EXISTING GRADE
PIERS 10E, 11E & E. ABUTMENT
TO BE REMOVED BELOW EX. GRADE



PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH

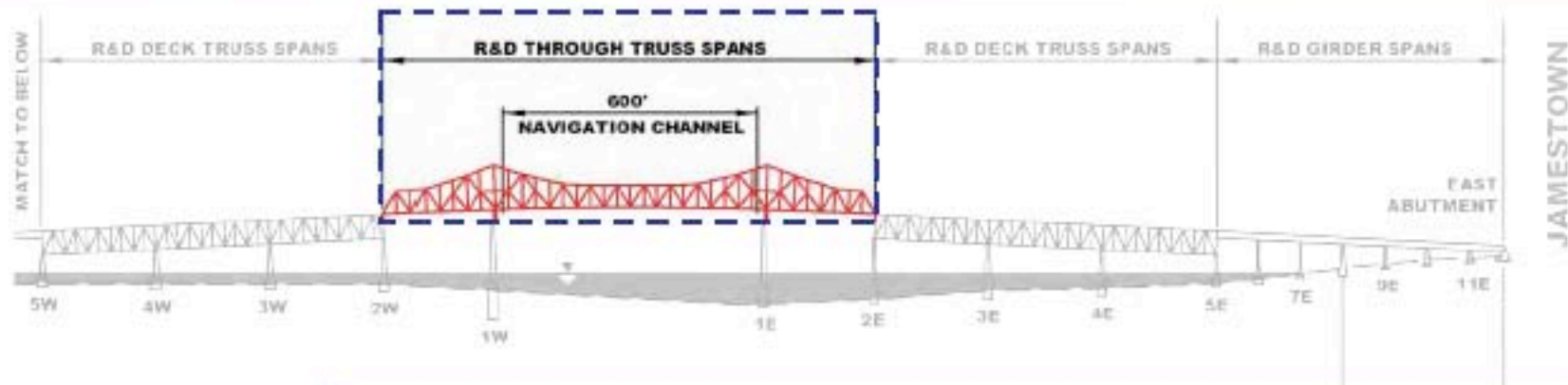


Ongoing Removal Operations



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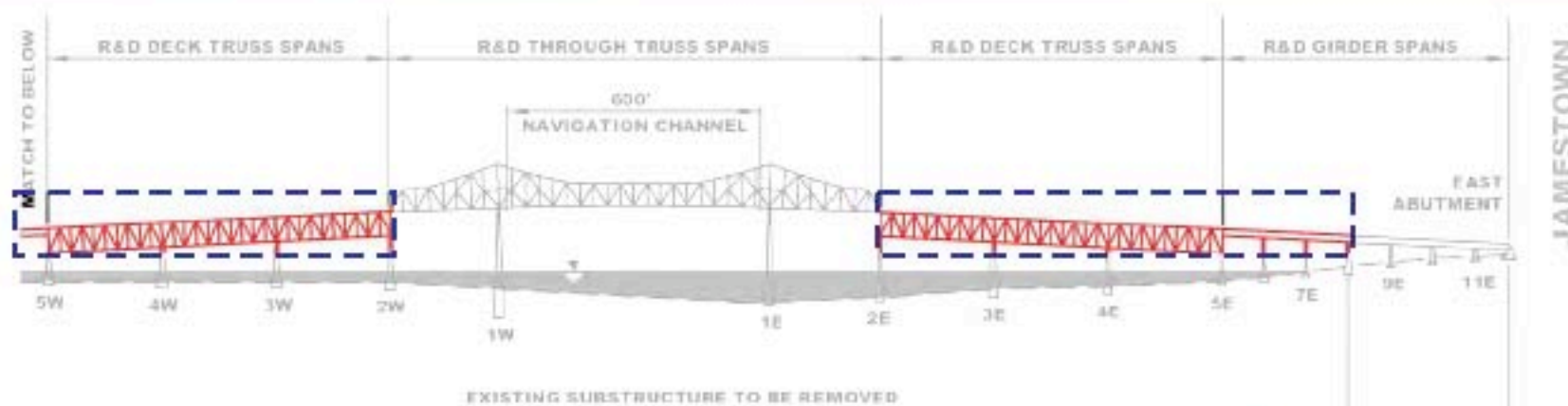
Event 1: Removal of the Through Truss Superstructure

- by controlled explosive methods
- will require one temporary long-term closure of the Jamestown-Verrazano Bridge
- anticipated to occur April 2006



PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH





PIERS 8E, 9E TO BE REMOVED
TO EXISTING GRADE
PIERS 10E, 11E & E. ABUTMENT
TO BE REMOVED BELOW EX. GRADE

Event 2: Removal of the Deck Truss and Girder Spans

- single controlled explosive demolition event for Deck Truss and Girder Spans
- will require one temporary long-term closure of the Jamestown-Verrazano Bridge
- anticipated to occur May / June 2006



PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH



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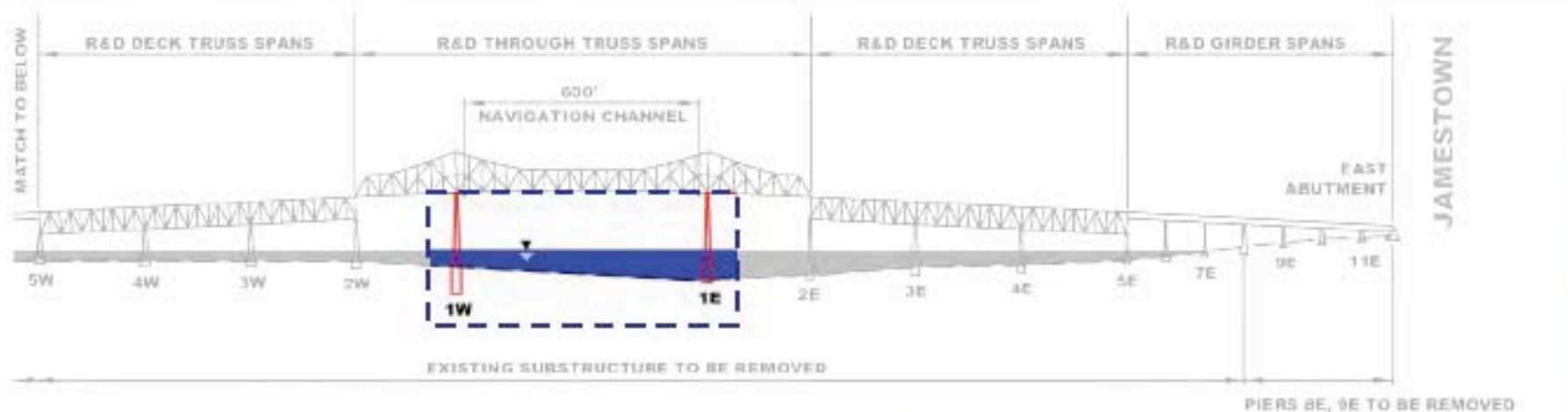
Demolition of the Four Bears Bridge

A similar demolition, of a bridge on the
Missouri River, North Dakota



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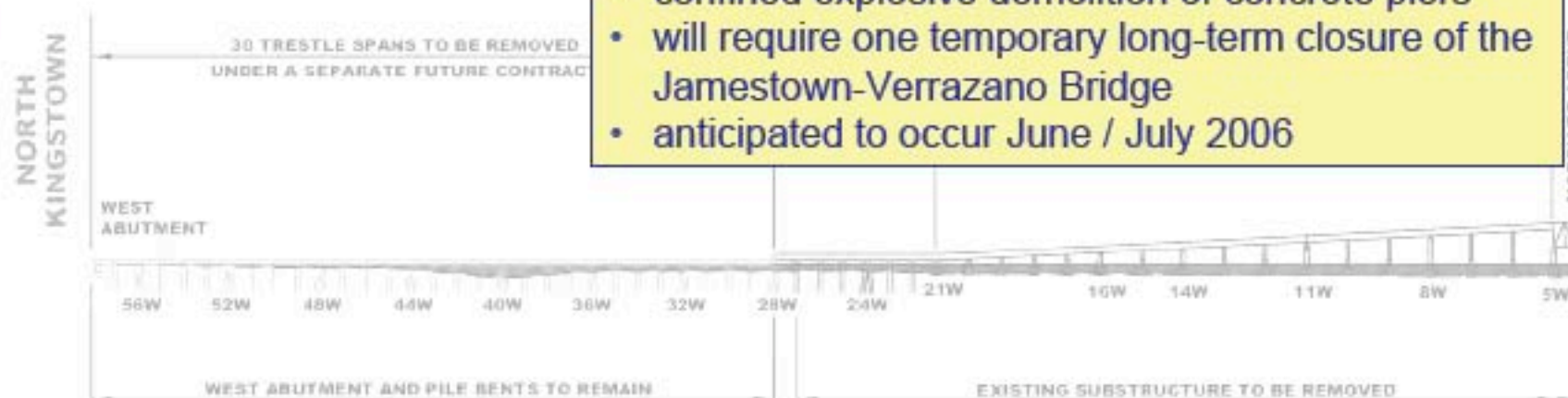
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PARTIAL ELEVATION

Event 3: Removal of Piers 1E and 1W

- confined explosive demolition of concrete piers
- will require one temporary long-term closure of the Jamestown-Verrazano Bridge
- anticipated to occur June / July 2006



PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH

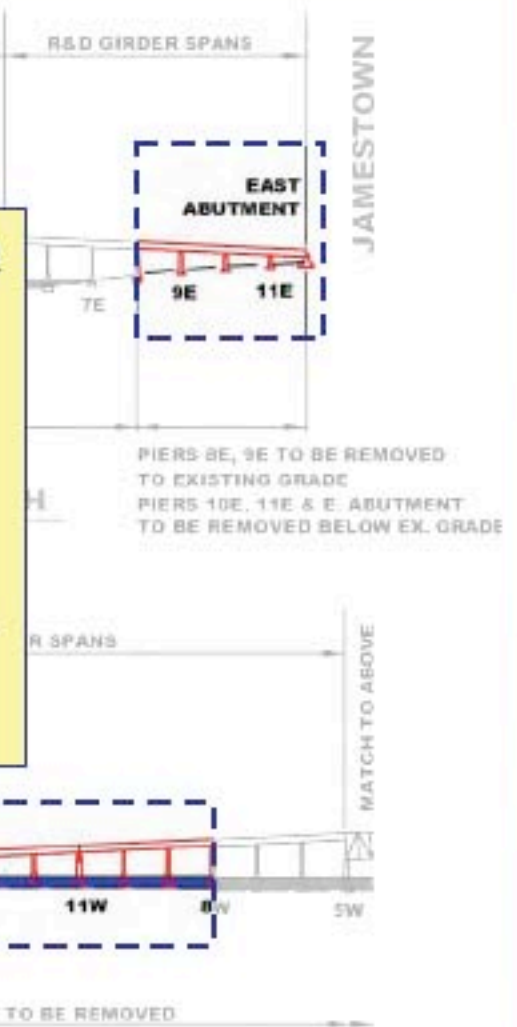


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Removal of Remaining Superstructure and Substructure

- remaining superstructure to be removed by conventional demolition methods
- remaining support piers on land to be removed by conventional demolition methods
- remaining support piers in the water to be removed by confined explosive demolition methods
- confined explosive demolition events will require temporary short-term closures of the Jamestown-Verrazano Bridge
- anticipated to occur Fall 2006



PARTIAL ELEVATION - EXISTING BRIDGE LOOKING NORTH



Explosives Safety

Controlled Explosive Demolition of Superstructure

► Event 1: Removal of the Through Truss

- 1,500-foot Clear Zone: *homes must be vacated*



Event 1: Controlled Explosive Demolition of the Through Truss



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Explosives Safety

Controlled Explosive Demolition of Superstructure

► Event 1: Removal of the Through Truss

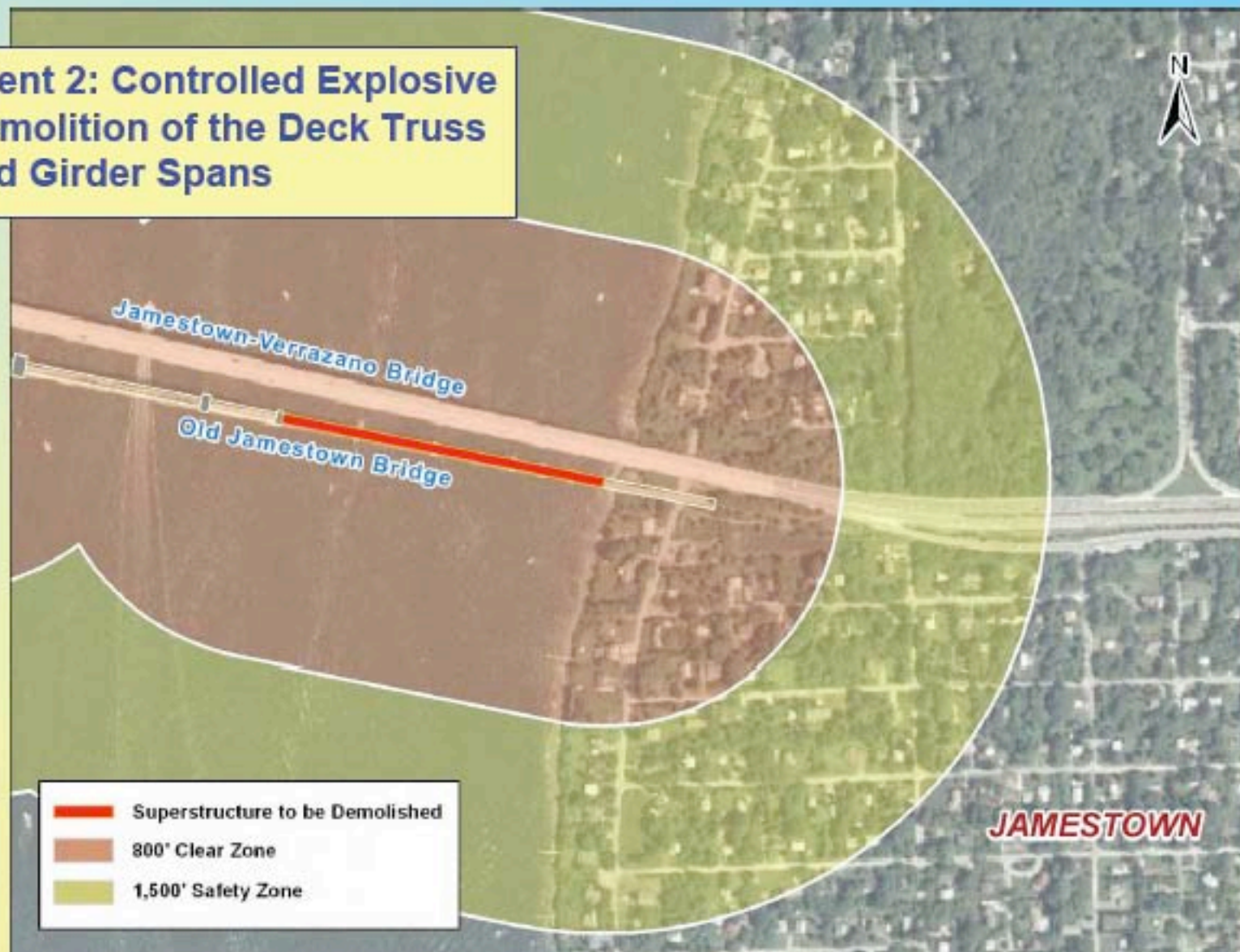
- 1,500-foot Clear Zone: *homes must be vacated*

► Event 2: Removal of the Deck Truss and Girder Spans

- 800-foot Clear Zone: *homes must be vacated*
- 1,500-foot Safety Zone: *residents advised to stay indoors, away from windows*



Event 2: Controlled Explosive Demolition of the Deck Truss and Girder Spans



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Explosives Safety

Controlled Explosive Demolition of Superstructure

► Event 1: Removal of the Through Truss

- 1,500-foot Clear Zone: *homes must be vacated*

► Event 2: Removal of the Deck Truss and Girder Spans

- 800-foot Clear Zone: *homes must be vacated*
- 1,500-foot Safety Zone: *residents advised to stay indoors, away from windows*

Confined Explosive Demolition of Substructure

► demolition of bridge piers 5E, 6E, and 7E near the Jamestown shoreline

- 500-foot Clear Zone: *homes must be vacated*



Confined Explosive Demolition of Piers 5E, 6E, & 7E



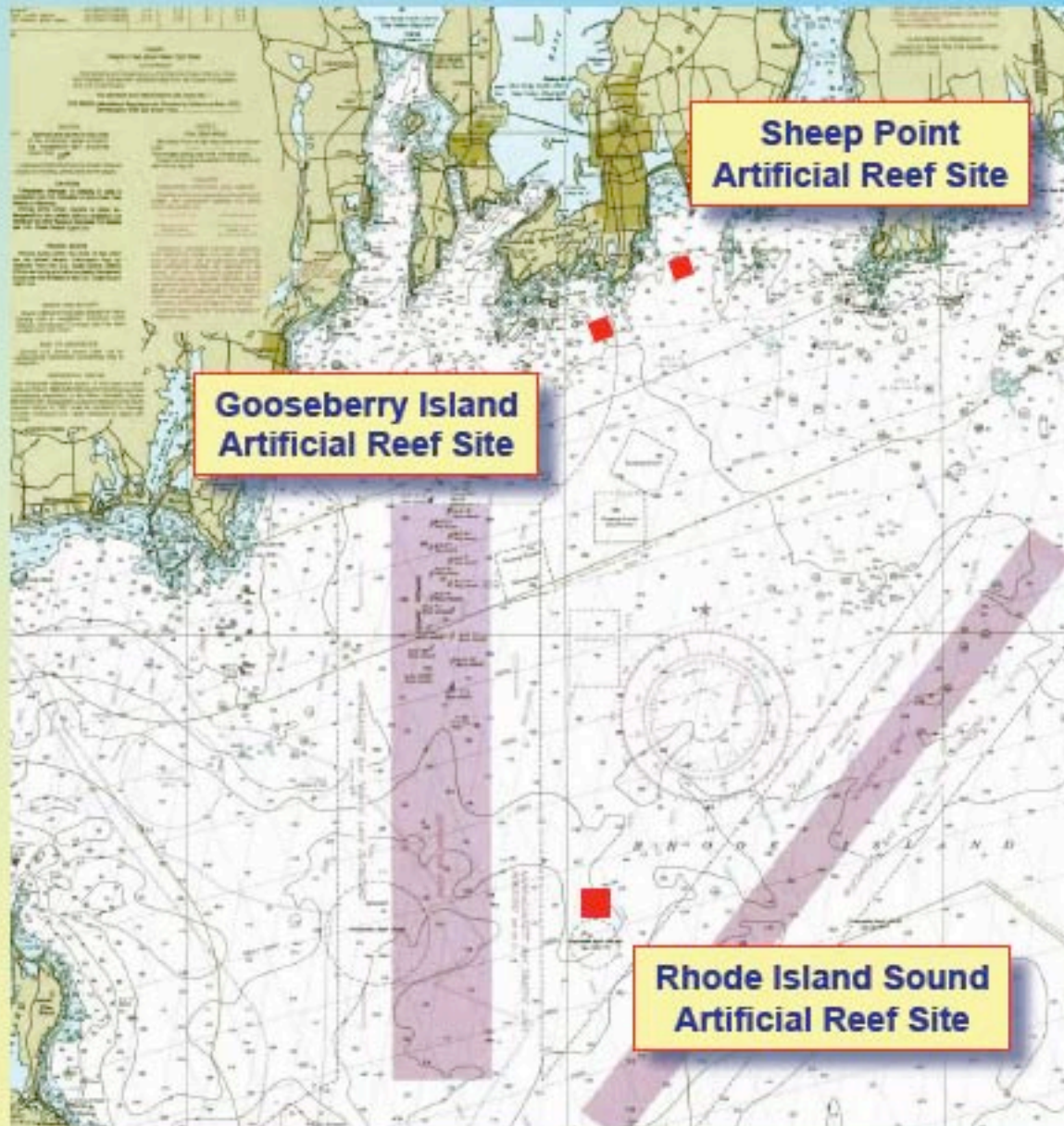
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Materials Removal

- ▶ approximately 6,000 tons of structural steel and 43,000 tons of concrete debris will be generated
- ▶ fallen debris in the West Passage to be retrieved by barge-mounted crane
- ▶ structural steel to be salvaged and recycled
- ▶ concrete debris to be used to create artificial reefs for marine habitat enhancement





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Temporary Closures of the Jamestown-Verrazano Bridge



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Temporary Closure Types

Long-term Closures

- ▶ not to exceed 4 hours in duration
- ▶ one required for each major controlled explosive demolition event (3 total):
 1. Removal of the Through Truss
 2. Removal of the Deck Truss and Girder Spans
 3. Removal of Piers 1E and 1W
- ▶ limited to Tuesdays, Wednesdays, and Thursdays between the hours of 10:00 a.m. and 2:00 p.m.

Short-term Closures

- ▶ not to exceed 30 minutes in duration
- ▶ required for explosive demolition of remaining piers
- ▶ 13 Short-term Closures anticipated
- ▶ limited to Tuesdays, Wednesdays, and Thursdays between the hours of 10:00 a.m. and 2:00 p.m.



Public Notifications

► 2-week advance notice leading up to each bridge closure

► Notification Methods:

- Roadside Variable Message Boards and Statewide Overhead Message Boards
- Highway Advisory Radio (1630 AM)
- Providence Journal and local newspapers
- broadcast news outlets
- RIDOT Web Site (www.dot.state.ri.us)
- separate and more direct means of communication with public safety officials has been established and successfully tested



Traffic Management - North Kingstown

- Route 138 Eastbound must exit to Boston Neck Road
- Route 138 Eastbound on-ramp closed





East Shore Road

State Route 138



ACCESS RESTRICTED DURING CLOSURE



ROAD CLOSED DURING CLOSURE



DIVERTED TRAFFIC ROUTE

Traffic Management - Jamestown

- Pell Bridge Newport and tolls to remain open
- Route 138 Westbound must exit to East Shore Road
- all Route 138 Westbound on-ramps in Jamestown closed

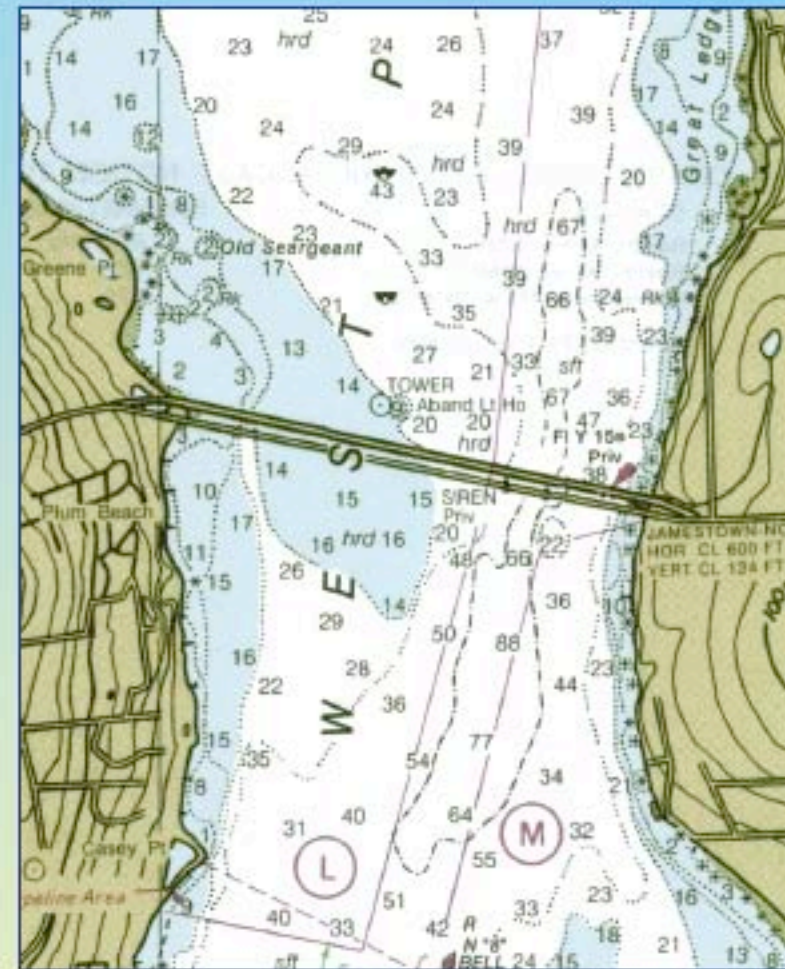


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Marine Navigation

- ▶ explosive demolition events will require closure of a portion of the West Passage to all recreational and commercial traffic
- ▶ RIDOT will coordinate with the U.S. Coast Guard to re-open the navigation channel as demolition operations proceed
- ▶ 3,000-foot clear zone to be established by the U.S. Coast Guard during controlled explosive demolition events



Public Safe Viewing Area

- *University of Rhode Island
Narragansett Bay Campus
South Ferry Road,
Narragansett*



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Thank You